

## MODEL

### 330 H<sub>2</sub>S / Total Sulfur Analyzer

This uniquely rugged and simple design by Envent utilizes a lead acetate based sensing system that provides a linear and interference-free output of H<sub>2</sub>S and Total Sulfur concentration.

## APPLICATIONS

Measures H<sub>2</sub>S and/or Total Sulfur in natural gas, petrochemical streams, condensate, or LPG.

## FEATURES

- Ranges from 0-50 ppb to 0-100%
- 1.5% accuracy, 1% repeatability
- Modbus Serial communications,
- Displays up to 5 times full scale
- Dual Isolated 4-20 mA outputs
- less than 20-second response time to alarm
- Interference-free Lead acetate sensor
- 60-90 day tape (longest tape life in the market)
- Optional CO<sub>2</sub> Sensor
- Optional Total Sulfur

## VALUE

The 330 measures H<sub>2</sub>S in natural gas or other process streams. The unit has dual 4-20 mA outputs, dual measurement alarms, plus trouble and fault alarm relays. An external magnetically-driven interface allows operator functions without opening any covers. The 330 displays H<sub>2</sub>S concentration in user specified units and as well will auto range to 5 times the lower calibrated range. Calibration is performed manually via the operator interface or automatically when connected to a calibration bottle with the optional auto calibration solenoid. The 330 is available with a number of optional sample systems and accessories to handle various applications such as high range H<sub>2</sub>S, Total Sulfur or H<sub>2</sub>S in liquids.

**Lead Acetate Sensors:** Lead acetate is essentially interference free from other sulfur compounds. This is why it is used by the vast majority in the industry when accurate measurement is required. The linear output enables the user to perform a single point calibration.

**Longest Tape Life:** The 330 offers the longest tape life in the market by using a proprietary tape advance algorithm to make complete use of the 300 foot tape. The unit will accept up to a 350-foot roll. Envent sensing tape is the strongest in the market.



**Model 330 Class 1, Div 1**

## SPECIFICATIONS

<b>Power</b>	12-24 vdc @ less than 3 watts or 100-240 VAC 50/60 HZ
<b>Electrical classification</b>	Class 1, Div1 Grps C & D certified to CSA standards
<b>Ambient Temperature</b>	0-50 °C (std) consult factory for other requirements
<b>Output Ranges</b>	H <sub>2</sub> S 0-50 ppb to 0-100 ppm are standard. Higher concentrations require optional dilution sample system.
<b>Response time</b>	20-sec alarm
<b>Accuracy</b>	1.5% of full scale
<b>Inputs</b>	24 bit A/D Microprocessor-based sensor block Low Tape Alarm Remote calibrate, Stream switch, or Low pressure alarm
<b>Outputs</b>	Dual isolated 4-20 mA (loop power required) Modbus serial RS-232 & RS-485 Four 5 amp SPDT alarm relays (high reading, high high reading, low tape, failure) Four solid state solenoid drivers ( auto cal, total sulfur, stream switching, valve actuator)
<b>Displays</b>	2 x 16 character LCD with backlighting Menu is scrolled by internal button or external magnetic switch
<b>Configuration Software</b>	A Windows™-based program for analyzer configuration, archive retrieval, Modbus mapping

## OPTIONAL EQUIPMENT

<b>Total Sulfur</b>	Total sulfur furnace—converts all sulfur compounds to H <sub>2</sub> S which allows analyzer to measure total sulfur. (Requires AC power)
<b>Auto Calibration</b>	Allows user to initiate a calibration based on time or external switch
<b>Stream Switching</b>	Allows switching of two input streams or from H <sub>2</sub> S to Total Sulfur measurement
<b>Dilution</b>	Allows measurements up to 100% H <sub>2</sub> S using a permeable membrane and H <sub>2</sub> S-free carrier gas.
<b>Liquid sampling</b>	Liquid sample system to measure H <sub>2</sub> S from hydrocarbon liquids
<b>Custom systems</b>	Envent can design custom integrated systems to meet application requirements
<b>Cabinets</b>	30" x 36" fiberglass or stainless steel
<b>Panels</b>	Standard system without cabinet is mounted on a 24"W x 32"H x ¼" thick anodized panel
<b>CO<sub>2</sub></b>	CO <sub>2</sub> measurement 0-20%
<b>H<sub>2</sub></b>	Savings used on H <sub>2</sub> S/TS systems



**Model 330 Total Sulfur Monitor**



**Permeable membrane dilution system**